

Claims

Claims 1-10 (Canceled)

11. (Previously Presented) A low viscosity, hot-melt stable adhesive composition, consisting essentially of:

- a) at least one block copolymer, comprising at least two terminal poly(vinyl aromatic) blocks and at least one central block of randomly copolymerised isoprene/butadiene mixtures in an isoprene/butadiene weight ratio of from 45/55 to 55/45, having a poly(vinyl aromatic) content in the range of from 17 wt% to 20 wt%, a total apparent molecular weight in the range of from 180,000 to 190,000, a content of 1,2-vinyl bonds and/or 3,4 vinyl bonds of at most 15 wt % in the conjugated diene blocks, and a coupling efficiency in the range of from 63% to 80%, and occurring in a weight proportion of from 40 wt % to 45 wt %, relative to the weight of the complete composition,
- b) an aliphatic/aromatic hydrocarbon tackifying resin, containing less than 16% by weight of aromatic structure as determined by H-NMR, a differential scanning calorimetry (DSC) glass transition temperature (T_g) between 30°C and 55°C, and a Ring and Ball softening point between 85°C and 95°C, in a weight proportion of from 45 to 55 wt %, relative to the weight of the complete composition,
- c) a plasticizer, in a weight proportion of from 5 wt % to 15 wt %, relative to the weight of the complete composition;

and having a stable hot-melt viscosity of plus or minus 5% of the starting value after 24 hours at 177°C and having a hot-melt viscosity of ≥ 80 Pa.s at 177°C.

12. (Previously Presented) The low viscosity, hot-melt stable adhesive composition of claim 11, wherein the block copolymer component (a) is a S--(I/B)--S block copolymer, wherein S represents a block of polymerised substantially pure styrene and (I/B) represents a randomly copolymerised isoprene/butadiene block.

13. (Previously Presented) The low viscosity, hot-melt stable adhesive composition of claim 12, wherein the component (a) block copolymer has an apparent total molecular weight of from 180,000 to 185,000, and a content of 1,2-vinyl bonds and/or 3,4-vinyl bonds, each in a proportion of from 5 to 10 wt % in the conjugated diene blocks.

14. (Previously Presented) The low viscosity, hot-melt stable adhesive composition of claim 11, wherein the component (b) has an H-NMR aromatic structure in the range of from 4 wt % to 10 wt %.

15. (Previously Presented) The low viscosity, hot-melt stable adhesive composition of claim 11, wherein the component (c) is a mineral oil.

16. (Previously Presented) An adhesive tape and label, comprising a carrier having disposed thereon a low viscosity, hot-melt stable adhesive composition, consisting essentially of:

- a) at least one block copolymer, comprising at least two terminal poly(vinyl aromatic) blocks and at least one central block of randomly copolymerised isoprene/butadiene mixtures in an isoprene/butadiene weight ratio of from 45/55 to 55/45, having a poly(vinyl aromatic) content in the range of from 17 wt% to 20 wt%, a total apparent molecular weight in the range of from 180,000 to 190,000, a content of 1,2-vinyl bonds and/or 3,4 vinyl bonds of at most 15 wt % in the conjugated diene blocks, and a coupling efficiency in the range of from 63% to 80%, and occurring in a weight proportion of from 40 wt % to 45 wt %, relative to the weight of the complete composition,
- b) an aliphatic/aromatic hydrocarbon tackifying resin, containing less than 16% by weight of aromatic structure as determined by H-NMR, a differential scanning calorimetry (DSC) glass transition temperature (T_g) between 30°C. and 55°C, and a Ring and Ball softening point between 85°C and 95°C, in a weight proportion of from 45 to 55 wt %, relative to the weight of the complete composition,
- c) a plasticizer, in a weight proportion of from 5 wt % to 15 wt %, relative to the weight of the complete composition;

and having a stable hot-melt viscosity of plus or minus 5% of the starting value after 24 hours at 177°C and having a hot-melt viscosity of ≥ 80 Pa.s at 177°C.

17. (Previously Presented) The adhesive tape and label of claim 16, wherein the block copolymer component (a) is a S--(I/B)--S block copolymer, wherein S represents a block of polymerised substantially pure styrene and (I/B) represents a randomly copolymerised isoprene/butadiene block.
18. (Previously Presented) The adhesive tape and label of claim 17, wherein the component (a) block copolymer has an apparent total molecular weight of from 180,000 to 185,000, and a content of 1,2-vinyl bonds and/or 3,4-vinyl bonds, each in a proportion of from 5 to 10 wt % in the conjugated diene blocks.
19. (Previously Presented) The adhesive tape and label of claim 16, wherein the component (b) has an H-NMR aromatic structure in the range of from 4 wt % to 10 wt %.
20. (Previously Presented) The adhesive tape and label of claim 16, wherein the component (c) is a mineral oil.
21. (Previously Presented) A packaging tape, comprising a carrier having disposed thereon a low viscosity, hot-melt stable adhesive composition, consisting essentially of:
- a) at least one block copolymer, comprising at least two terminal poly(vinyl aromatic) blocks and at least one central block of randomly copolymerised isoprene/butadiene mixtures in an isoprene/butadiene weight ratio of from 45/55 to 55/45, having a poly(vinyl aromatic) content in the range of from 17 wt% to 20 wt%, a total apparent

molecular weight in the range of from 180,000 to 190,000, a content of 1,2-vinyl bonds and/or 3,4 vinyl bonds of at most 15 wt % in the conjugated diene blocks, and a coupling efficiency in the range of from 63% to 80%, and occurring in a weight proportion of from 40 wt % to 45 wt %, relative to the weight of the complete composition,

b) an aliphatic/aromatic hydrocarbon tackifying resin, containing less than 16% by weight of aromatic structure as determined by H-NMR, a differential scanning calorimetry (DSC) glass transition temperature (T_g) between 30°C and 55°C, and a Ring and Ball softening point between 85°C and 95°C, in a weight proportion of from 45 to 55 wt %, relative to the weight of the complete composition,

c) a plasticizer, in a weight proportion of from 5 wt % to 15 wt %, relative to the weight of the complete composition;

and having a stable hot-melt viscosity of plus or minus 5% of the starting value after 24 hours at 177°C and having a hot-melt viscosity of ≥ 80 Pa.s at 177°C.

22. (Previously Presented) The packaging tape of claim 21, wherein the block copolymer component (a) is a S--(I/B)--S block copolymer, wherein S represents a block of polymerised substantially pure styrene and (I/B) represents a randomly copolymerised isoprene/butadiene block.

23. (Previously Presented) The packaging tape of claim 22, wherein the component (a) block copolymer has an apparent total molecular weight of from 180,000 to 185,000, and a content of 1,2-vinyl bonds and/or 3,4-vinyl bonds, each in a proportion of from 5 to 10 wt % in the conjugated diene blocks.
24. (Previously Presented) The packaging tape of claim 21, wherein the component (b) has an H-NMR aromatic structure in the range of from 4 wt % to 10 wt %.
25. (Previously Presented) The packaging tape of claim 21, wherein the component (c) is a mineral oil.
26. (Previously Presented) Block copolymers to be used in the low viscosity, hot-melt stable adhesive composition comprising: at least one block copolymer, consisting essentially of: at least two terminal poly(vinyl aromatic) blocks and at least one central block of randomly copolymerised isoprene/butadiene mixtures in an isoprene/butadiene weight ratio of from 45/55 to 55/45, having a poly(vinyl aromatic) content in the range of from 17 wt% to 20 wt%, a total apparent molecular weight in the range of from 180,000 to 190,000, a content of 1,2-vinyl bonds and/or 3,4 vinyl bonds of at most 15 wt % in the conjugated diene blocks, and a coupling efficiency in the range of from 63% to 80%, and occurring in a weight proportion of from 40 wt % to 45 wt %, relative to the weight of the complete composition.
27. (Previously Presented) The block copolymers of claim 26, characterized in that they have the structure S--(I/B)--S, wherein S represents a block of polymerised substantially pure styrene

and (I/B) represents a randomly copolymerised isoprene/butadiene block.

28. (Previously Presented) The block copolymers of claim 26, characterized in that they have an apparent total molecular weight of from 180,000 to 185,000, and a content of 1,2-vinyl bonds and/or 3,4-vinyl bonds, each in a proportion of from 5 to 10 wt % in the conjugated diene blocks.

29. (Previously Presented) The block copolymers of claim 27, characterized in that they have an apparent total molecular weight of from 180,000 to 185,000, and a content of 1,2-vinyl bonds and/or 3,4-vinyl bonds, each in a proportion of from 5 to 10 wt % in the conjugated diene blocks.

30. (Canceled)

31. (Canceled)